#### MINING

### INTRODUCTION

Mining is the removal and primary processing of naturally occurring materials from the earth for economic use. For purposes of this definition, "processing" includes screening, crushing, stockpiling, all of which utilize materials removed from the site where the processing activity is located. Mining activities also include in-water dredging activities related to mineral extraction. Processing does not include general manufacturing, such as the manufacture of molded or cast concrete or asphalt products, asphalt mixing operations, or concrete batching operations.

The removal of sand and gravel from shoreline areas of Washington usually results in erosion of land and silting of water. These operations can create silt and kill bottom-living animals. The removal of sand from marine beaches can deplete a limited resource which may not be restored through natural processes.

### **POLICIES**

- 1. Require that adequate protection against sedimentation, silt production and chemical contamination of public waters be provided.
- 2. Require mining of sand and gravel and other minerals be done in conformance with the Washington State Surface Mine Reclamation Act (Chapter 78.44 RCW) and the provisions of the Snohomish County Code.
- 3. Prohibit the commercial removal and strictly control other removal of sand and gravel or other minerals from marine beaches.
- 4. Regulate the excavation of riverbed materials from within the wetted perimeter.
- 5. Minimize the adverse visual impact of sand and gravel and other mineral excavation on surrounding shoreline areas.
- 6. Maintain the integrity of river hydraulic systems when conducting surface mining.
- 7. Recognize the sensitivity of flood hazard areas when considering sand and gravel and other mineral excavation operations.
- 8. In accord with provisions of the comprehensive plan and zoning code, prohibit sand and gravel and other mineral excavations which would disrupt agricultural activities or permanently remove prime agricultural lands from production when other viable excavation alternatives exist.
- 9. Require all mineral excavation operations to provide maximum protection for anadromous fisheries resources.
- 10. Give preference to mining operations which remove the annual accretion of sand and gravel from river gravel bar areas over operations which extract nonrenewable deposits.
- 11. Encourage the development of mining operations in nonshoreline areas before considering their location in shoreline areas.
- 12. Ensure that site reclamation plans are compatible with existing and proposed land uses in the immediate vicinity.

### **REGULATIONS**

#### General

- 1. Applications for mining permits shall be accompanied by a report on the geologic makeup of the site, prepared by a geologist or geotechnical engineer, addressing the following (at a minimum):
  - Type of material(s) present on the site;
  - b. Quantity of material(s) (by type);
  - c. Quality of material(s) by type;
  - d. Lateral extent of mineral deposit;
  - e. Depth of mineral deposit;
  - f. Depth of overburden;
- 2. Applications for excavation of sand, gravel and other minerals within any 100 year flood plain shall be accompanied by a report on the potential hydraulic impacts of the proposed operation. Said report shall contain the following information (at a minimum):
  - a. Flood information including:
    - 1. The minimum flood frequency necessary to inundate the site.
    - 2. The velocity and depth of inundating floodwaters in the proposed excavation area for the 10, 50 and 100 year flood events, and the potential for the proposed development to increase local flood flow velocities.
    - 3. The location of the floodway of the 100-year floodplain on the project site and the location of any improvements or uses proposed in the said floodway. (Sec. 3 of Ord. 84-015 adopted 2-27-84; Sec. 2 of Ord. 83-054 adopted 5-23-83)
    - 4. Type and quantity of sand, gravel and other materials anticipated to be deposited annually at any proposed bar excavation site.
  - b. The potential for erosion in the area, including possible river channel changes. This includes potential for floodwater erosion of existing or proposed berms or dikes located on the project site.
  - c. The potential for acceleration of erosion and/or sediment transport of materials upstream and downstream of the site due to the proposed excavation.
  - d. The potential for existing upstream or downstream or on-site spawning and rearing areas to be affected by bedload or finer material deposition or excavation within the excavation area.

The above information is to be required only once for each particular project if the proposal is approved. Subsequent applications for the same proposal (due to permit expiration or need for permit renewal) shall not require submittal of this information unless there is evidence that changes in hydraulics have occurred or that new information is available.

3. A reclamation plan shall be submitted with each application. Such plan shall provide for reclamation of the site into a use which is permitted by this program for the site and shall indicate the time period over which excavation shall continue.

- 4. The applicant must demonstrate that the following potential impacts will not occur, are insignificant, or can be adequately mitigated;
  - a. Channel changes.
  - b. Changes in transport or deposition of sediment.
  - c. Bank erosion upstream or downstream of the excavation.
  - d. Changes to riparian habitat.
- 5. Scalping of streamway bars is permitted provided that: No more material may be removed in one mining season than will predictably be replaced by natural processes during the subsequent wet season.
- 6. Mining of marine and lake beaches, including but not limited to sand, gravel, cobbles, boulders, or quarry rock from any marine or lake beach for purposes of sale or use in manufacturing products or for any other commercial or industrial purpose, is prohibited;
- 7. Stockpiling and processing of materials shall not be allowed in the floodway or within the density fringe area of the base (100-year frequency) flood unless the applicant can demonstrate compliance with Title 27 Snohomish County Code. (Sec. 3 of Ord. 84-015 adopted 2-27-84; Sec. 2 of Ord. 83-054 adopted 5-23-83).
- 8. Noncommercial mining of sand and gravel on marine beaches or in river beds shall be strongly discouraged and shall be prohibited if necessary to preserve natural wildlife habitats and natural processes such as dune systems, littoral drift, erosion, accretion, and depletion.
- 9. All shoreline mining operations shall use buffer zones, settling ponds, erosion prevention measures, and/or other precautions to protect the shoreline from mine-generated sediment, debris and contaminated effluent.
- 10. Topsoil overburden having value for agriculture or other beneficial uses shall not be disposed in a manner which precludes future utilization or impairs its value.
- 11. Mining in or under Snohomish County waters shall be undertaken only during periods permitted by the appropriate State regulatory agencies.
- 12. Excavation of sand, gravel and other minerals shall be done in strict conformance to the Washington State Surface Mine Reclamation Act (RCW 78.44) and the provision of the Snohomish County Code.
- 13. Should substantial evidence be submitted to Snohomish County indicating that the continuance of any project in the current manner is detrimental to the proper functioning of the subject river, this permit shall be reviewed by the granting authority to determine if further conditions should be imposed or if the permit should be terminated. (Sec. 3 of Ord. 84-015 adopted 2-27-84; Sec. 2 of Ord. 83-054 adopted 5-23-84).

### **Natural Environment**

1. Mining is not allowed in the Natural Environment.

## **Conservancy Environment**

- 1. Open pit type mining is not allowed in the Conservancy Environment.
- 2. Scalping of streamway bars is a conditional use in the Conservancy Environment.
- 3. There shall be no processing of minerals at the bar removal sites; all processing shall be done at the plant site or some other approved site within the County.

# **Rural Environment**

1. A minimum 50-foot buffer of undisturbed soil and vegetation shall be maintained between mining sites, including all accessory developments, and other properties not used for mining. A minimum 100-foot buffer of undisturbed soil and vegetation shall be maintained between mining sites and abutting swamps, marshes and bogs or other bodies of water; provided that, the water body buffer requirement may be waived for approved streamway bar scalping operations. (Sec. 3 of Ord. 83-054 adopted 5-23-83)

## **Suburban Environment**

1. Mining is not allowed in the Suburban Environment.

# **Urban Environment**

1. Mining is allowed in the Urban Environment subject to the General Regulations.